



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

0007

EPA Region 5 Records Ctr.



222846

REPLY TO THE ATTENTION OF:

MEMORANDUM **AUG 26 2004**

SUBJECT: ENFORCEMENT ACTION MEMORANDUM - Determination of Need to Conduct a Time-Critical Removal Action, Tower Hill Road Site - Operable Unit 1, Village of Gilberts, Kane County, Illinois (Site ID #B59Q)

FROM: Mike W. Ribordy, On-Scene Coordinator
Emergency Response Branch - Section 2

TO: Richard C. Karl, Acting Director
Superfund Division

THRU: Thomas Geishecker, Acting Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to document the determination of an imminent and substantial threat to public health, welfare, and to the environment posed by the presence of elevated levels of lead and arsenic in soils (both at the surface and at depth) at the Tower Hills Road Site - Operable Unit 1 (OU-1), located in the Village of Gilberts, Kane County, Illinois.

The proposed response action is U.S.EPA oversight of work to be performed by the current owner, NextMedia Operating, Inc. (NextMedia), under an Administrative Order On Consent (AOC). The work is expected to include the excavation and off-site disposal of lead and arsenic contaminated soils. These soils pose a threat to human health and the environment. Additional work includes the assessment of nearby areas to ensure they are not contaminated and to confirm contaminated soils have not migrated off-site.

The Tower Hills Road Site (Site) is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # ILN000509192

A. Physical Location and Description

The Tower Hill Road Site is located in the Village of Gilberts, Kane County, Illinois, just west of the Chicago and Northwestern Railway tracks between Mill and Jackson Streets. The Site is divided into two operable units (OU). The geographical coordinates for the Site are Latitude: 42°06'19" N and Longitude: 88°22'34" W.

The westernmost unit is OU-1 and is the subject of this Action Memorandum. OU-1 is located on the eastern portion of an approximately 4.99 acre parcel of real property commonly known as 114 Tower Hill Road, Gilberts, Illinois. The 114 Tower Hill Road property is currently owned by NextMedia and consists of vacant farm land and wetlands. A radio transmission tower is located on the northern portion of the NextMedia property and is the only structure on the property.

OU-2 is owned by the Village of Gilberts. It is located immediately east of OU-1. OU-2 is approximately 50 feet wide and 800 feet in length. The northern and southern portions of the Village parcel are covered with grass. The central portion consists of the Village public works building, a road salt shelter, and a gravel parking/storage area. The Village of Gilberts parks municipal vehicles in this area.

U.S. EPA will document in a separate action memorandum its determination of an imminent and substantial threat to public health, welfare, and to the environment posed by the presence of elevated levels of lead and arsenic in soils (both at the surface and at depth) at the Tower Hills Road Site-OU-2.

B. Environmental Justice Analysis

According to the Region 5 Superfund Environmental Justice Analysis for Illinois, the low income percentage is 27% or greater and the minority percentage is 32%. To meet the Environmental Justice (EJ) concern criteria, the area within one mile of the Site must have a population that is twice the state low income and/or twice the state minority percentage. That is, the area must be at least 54% low income and/or 64% minority. There are approximately 826 people who live within one mile of the Site. The minority population is 4% and the low income population is 3%. Therefore, this Site does not meet the

Region's EJ criteria based on demographics as identified in Region 5's "Interim Guidelines for Identifying and Addressing a Potential EJ Case", (June, 1998) (See Attachment 1).

C. Site Description and Background

The Tower Hill Road Site is located immediately west of a mixed residential/commercial area. With the exception of the open excavation located within OU-1, the Site is not fenced.

To the immediate north of the Site is a residence currently occupied by a family that includes a son believed to be between five and ten years of age. Immediately east of the Site is a railroad track and right of way operated by the Chicago and Northwestern Railroad but apparently owned by the Union Pacific Railroad. The tracks and right-of-way are 100 feet wide. East beyond the railroad right-of-way are a number of residences, the Village Hall and small businesses. The nearest residences to the east are less than 200 feet from the Site. Approximately 58 homes are located within one mile of the Site. The southern portion of the Site consists of a park and an approximately 300 foot wide swath of wetlands. Farm fields lie to the west of the Site.

U.S. EPA and Illinois Environmental Protection Agency (Illinois EPA) representatives have talked with local residents and public officials in order to get information about the Site's history. Residents and local officials have advised U.S. EPA that Raymond L. McNew, Sr. operated a battery cracking/lead recycling facility on the Site during the early to mid-1960's. Mr. McNew is also reported to have accepted scrap of all types at the Site. Mr. McNew apparently leased portions of the Site from a person known as Mr. Hennessy.

Mr. McNew apparently broke open the battery casings and allowed the acid material to drain on the ground. He removed the lead from the batteries and stored the lead on the Site. Mr. McNew is reported to have operated the battery recycling facility at the Site for several years before he relocated his operation to an area approximately 600 feet to the north. U.S. EPA refers to this northern area as the Gilberts/Kedzie Site.

U.S. EPA has divided the Site into two units to reflect the separate ownership. OU-1 is the westernmost portion of the Site and is owned by NextMedia Operating, Inc. OU-2 is the eastern portion of the Site and is owned principally by the Village of Gilberts. Union Pacific Railroad may also own a portion of OU-2.

U.S. EPA has observed surface conditions on both OU-1 and OU-2. The surface conditions appear identical. Fragments of black plastic battery casings can be readily observed in surface soils throughout OU-1 and OU-2. From the location of the battery casings, U.S. EPA has concluded that Mr. McNew's battery recycling operations took place on portions of both OU-1 and OU-2.

D. Other Action to Date

On March 10 and 11, 2004, the Illinois EPA collected approximately 150 soil samples from the Gilberts/Kedzie Site. As set forth above, this Site is located approximately 600 feet north of the Tower Hill Road Site. U.S. EPA has evidence to support the conclusion that the soils at the Gilberts/Kedzie Site were contaminated by Mr. McNew's battery recycling operations just as Mr. McNew's battery recycling operations contaminated the soils at the Tower Hill Road Site-OU-1 and OU-2.

Soil samples collected on March 10 and 11, 2004, were analyzed using a field-based X-Ray Fluorescence Spectrum Analyzer (XRF). The results indicate that significant levels of lead are present at the Gilberts/Kedzie Site. Illinois EPA detected concentrations of lead in soils up to 225,920 ppm. Illinois EPA detected approximately 40 locations with total lead concentrations above 10,000 ppm.

On March 15, 2004, the Illinois EPA referred the Gilberts/Kedzie Site to U.S. EPA for a time-critical removal assessment and an emergency removal action to help control access to and/or abate the immediate hazards at the Gilberts/Kedzie Site.

On March 26, 2004, U.S. EPA conducted a site inspection at Gilberts/Kedzie Site to evaluate the need for a removal action. U.S. EPA determined that an emergency removal action was necessary to mitigate immediate threats to public health, welfare, and the environment posed by the elevated levels of lead in the surface soils and the accessibility of the property to the public.

On March 30, 2004, U.S. EPA began preparations for installing a chainlink fence around the Gilberts/Kedzie Site. On April 1, 2004, the acting Emergency Response Branch Chief verbally approved a \$25,000 ceiling for the Emergency and Rapid Response Services (ERRS) contractor to initiate the removal action. The ERRS contractor mobilized to the Gilberts/Kedzie Site the same day and began installation of a chainlink fence. The contractor completed installation of the fence around the Gilberts/Kedzie

Site on April 7, 2004. The Emergency Removal Action Memorandum was signed on April 30, 2004.

On April 28 and 29, 2004, the Illinois EPA, Office of Site Assessment, in cooperation with U.S. EPA conducted an assessment of the Gilberts/Kedzie Site. Illinois EPA soil samples detected total lead concentrations up to 120,000 parts per million (ppm), with a concentration of 678 ppm pursuant to the Toxicity Characteristic Leaching Procedure (TCLP). In addition, Illinois EPA detected arsenic in soil samples up to 290 ppm.

During the April assessment work, U.S. EPA and Illinois EPA had the opportunity to talk with area residents and village officials. The residents and Village officials informed Illinois EPA and U.S. EPA that Mr. McNew had operated his battery recycling facility at the Tower Hill Road Site.

On June 3 and 4, 2004, the Illinois EPA Office of Site Assessment, in cooperation with U.S. EPA conducted an assessment on the property owned by the Village of Gilberts (Tower Hill Road Site-OU-2). Inadvertently, Illinois EPA also collected samples from portions of the Tower Hill Road Site-OU-1.

During the assessment of Tower Hill Road Site-OU-2, Illinois EPA and U.S. EPA assessed approximately 50 sampling locations using a Geoprobe coring device and a field-based XRF. Nine additional soil samples were collected and sent to Region 5's Central Regional Laboratory for analysis. Total lead concentrations up to 48,000 ppm were detected in the upper one foot of soil, with a concentration of 44.4 mg/L pursuant to the TCLP.

In many instances, Illinois EPA analyzed soils that were collected less than ten feet from the property line dividing OU-1 and OU-2. U.S. EPA observed that the surficial soils on OU-1 and OU-2 appeared identical and that both included heavy concentrations of black plastic fragments from battery casings. Based upon the field assessment, U.S. EPA concluded that the lead contamination extends from the surface to approximately four feet below the surface throughout OU-1 and OU-2.

In early June 2004, and unbeknownst to U.S. EPA, NextMedia began a cleanup of what U.S. EPA now refers to as Tower Hill Road Site OU-1. The cleanup consisted of the excavation and removal of lead-contaminated soils. U.S. EPA and Illinois EPA became aware of NextMedia's cleanup activities on or about July 15, 2004.

On July 23, 2004, U.S. EPA met on the Tower Hill Road Site with representatives of the Illinois EPA, the Illinois Office of the

Attorney General, the Office of the State's Attorney of Kane County, Illinois, and the Village of Gilberts. NextMedia's environmental consultant, URS, also sent a representative to the meeting.

During the July 23, 2004, meeting, U.S. EPA representatives observed an excavation approximately 60 feet wide, 90 feet long and 4 feet deep. There was some water pooling in portions of the excavation. The excavation was surrounded by orange plastic fencing. The excavation is believed to be located adjacent to a 100-year flood zone. Wetland vegetation is visible almost immediately to the south of the excavation.

U.S. EPA representatives observed an intact 55-gallon drum in the south wall near the southeast corner of the excavation. The walls of the excavation were riddled with black plastic battery casing fragments. The black plastic battery casing fragments observed in the walls of the excavation are identical in appearance to those black plastic battery casings found on the Gilberts/Kedzie Site north and on the Tower Hill Road Site-OU-2. U.S. EPA's observations support the conclusion that the battery recycling operations took place within the boundaries of both OU-1 and OU-2, and that surficial soils at both locations are contaminated with lead.

On July 25, 2004, U.S. EPA requested that NextMedia suspend cleanup operations at the Tower Hill Road Site-OU-1 until the parties have executed an Administrative Order On Consent. NextMedia has agreed to suspend operations and to replace the orange plastic fence surrounding the excavation with a chainlink fence.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions present at the Tower Hill Road Site-OU-1 constitute an imminent and substantial threat to the public health, or welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), as amended, 40 CFR Part 300. These factors include, but are not limited to, the following:

1) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

The threat of human exposure to surface soils contaminated with hazardous levels of lead is present at the Tower Hill Road Site-OU-1. The Tower Hills Road Site is situated in a mixed residential and commercial area. Approximately 58 homes are located near the Site. The Site is bordered to the east by a residential neighborhood. U.S. EPA has reviewed sampling results that indicate near surface soils on OU-2 contain extremely elevated levels of both total lead (up to 48,000 ppm) and TCLP lead (up to 44.4 mg/L). U.S. EPA has information that the same battery recycling operations which occurred on OU-2 also occurred on OU-1. U.S. EPA representatives have observed that surficial conditions on OU-1 are identical to conditions on OU-2. U.S. EPA has observed that soils on and in OU-1 contain high concentrations of black plastic battery casing fragments. U.S. EPA has concluded on the basis of this information and these observations that OU-1 contains high concentrations of lead-contaminated soils.

Lead has been designated a hazardous substance pursuant to Section 102(a) of CERCLA, 42 U.S.C. 9620(a). The Resource Conservation and Recovery Act (RCRA) hazardous waste standard for lead is 5.0 ppm pursuant to the TCLP (D008 characteristic waste).

U.S. EPA has concluded that there exists a potential for exposure of humans and animals to lead, a hazardous substance, because of the close proximity of a residential neighborhood to OU-1. U.S. EPA also considered the proximity of Village employees working on OU-2 and the wetlands and wetland fauna present immediately south of OU-1 as potential for exposure of humans and animals.

Lead exposure via inhalation and/or ingestion can have detrimental effects on almost every organ and system in the human body. Off-site migration of the documented hazardous waste would greatly increase the potential exposure to nearby human populations, animals, or the food chain.

The Tower Hill Road Site is not fenced except for the excavation area in OU-1. Residents and Village officials have reported to U.S. EPA that children have been seen playing on the Site where lead-contaminated soils are present at the surface.

The effects of lead exposure are more severe for young children and the developing fetus through exposure to a pregnant woman. The harmful effects of lead include premature births, lower birth

weight, decreased mental ability in the infant, learning difficulties, and reduced growth in young children.

In adults, lead increases blood pressure, induces anemia as a result of the inhibition of hemoglobin synthesis, decreases reaction time, affects memory, and damages the male reproductive system. Lead is also considered by U.S. EPA to be a class B2 or probable human carcinogen. Reference: ATSDR. 1993.

Toxicological Profile for Lead. Agency for Toxic Substances and Disease Registry, Division of Toxicology. Atlanta, GA. U.S. Department of Health and Human Services, Public Health Service.

2) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

U.S. EPA has analytical results of soil samples collected at OU-2 that indicate the presence of elevated levels of lead at or near the surface in OU-2. U.S. EPA has documented in certain samples total lead levels of 48,000 ppm with the majority of the elevated lead levels occurring in surface soils. One of the samples collected indicates that the levels of TCLP lead present in the waste and surrounding soils exceeds the RCRA regulatory limit of 5 mg/l.

As set forth above, U.S. EPA has information and has made observations to support the conclusion that lead-contaminated soils exist within the boundaries of OU-1 and that the concentrations of lead in soils within OU-1 are similar to the concentrations found within OU-2.

There are no controls in place to prevent migration of these hazardous substances. Numerous human receptors are located within one-half mile of the Site. Trespassing has been documented at the Site in the past. Because the surficial soils are contaminated with lead, trespassers may get lead-contaminated soils on their shoes or boots. The lead-contaminated shoes or boots may deposit the lead-contaminated soils in neighboring residences or workplaces.

3) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

In the summer months, this area of Illinois is subject to periods of arid weather and moderately high temperatures. These warm, dry periods can cause soils at the Site to become dust-like. These conditions increase the likelihood that lead-contaminated

soils will be picked-up by westerly winds, migrate off-site and impact the surrounding residential properties.

Large rain events, coupled with inadequate vegetative cover, could result in the off-site migration of the lead-contaminated surface soils from OU-1.

4) The availability of other appropriate Federal or State response mechanisms to respond to the release;

In a letter dated March 15, 2004, the Illinois EPA formally requested U.S. EPA's assistance in conducting a time critical removal assessment and possible removal action at the Gilberts/Kedzie Site. The Illinois EPA has verbally agreed that U.S. EPA would continue in the lead at the Tower Hill Road Site. The Illinois EPA has indicated they do not have the resources to conduct the required removal at the Tower Hill Road Site.

IV. ENDANGERMENT DETERMINATION

The Tower Hill Road Site-OU-1 contains elevated concentrations of lead in surface and subsurface soils. Lead is present throughout the Tower Hill Road Site-OU-1 in concentrations that U.S. EPA has determined pose a threat to human health and the environment. Until addressed, the lead contaminated soils present at the Tower Hill Road Site-OU-1 pose potential inhalation, ingestion and direct contact hazards to surrounding residents in this residential and commercial area. In addition, contaminated soils may migrate and impact surrounding areas, including a nearby residential area and an adjacent wetland.

Given the conditions at the Tower Hill Road Site-OU-1, the nature of the suspected hazardous substances on the Tower Hill Road Site-OU-1, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from the Tower Hill Road Site-OU-1, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS

The On-Scene Coordinator (OSC) proposes the following actions be undertaken by the potentially responsible party (PRP) to mitigate threats posed by the presence of hazardous substances at the Tower Hill Road Site-OU-1:

- a) Prepare a Site work plan that describes the tasks to be performed and includes a time-line for the performance of the tasks.

- b) Develop and implement a site-specific Security Plan and Health and Safety Plan addressing continuous monitoring of air borne contaminants and dust control measures.
- c) Determine the degree and identify the extent of soil contamination on the Tower Hill Road Site-OU-1, including any contamination that has migrated to other portions of the NextMedia property.
- d) Characterize, excavate, and properly dispose of (in accordance with U.S. EPA's Off-Site Rule (40 CFR Section 300.440, 58 Federal Register 49215, September 22, 1993)) contaminated soils with lead greater than 400 mg/kg and arsenic greater than 13 mg/kg¹, unless site specific removal action limits (RALs) are developed by the PRP and approved by U.S. EPA.
- e) Stage, sample, remove, and dispose of drums and containers and their contents in accordance with the U.S. EPA's Off-Site Rule (40 CFR Section 300.440).
- f) Conduct confirmatory soil screening using an XRF and sampling to confirm that the cleanup goals have been achieved.
- g) Properly address any excavated areas by backfilling with clean soil, providing erosion control measures as necessary, and restoring excavated areas.
- h) Properly address any additional hazardous waste and/or materials identified during the removal action.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances or contaminants at the Tower Hill Road Site-OU-1 which may pose an imminent and substantial endangerment to public health and safety, and to the environment. These response actions do not impose a burden on the affected property disproportionate to that which the property contributes to the conditions being assessed.

¹The lead and arsenic cleanup goals of 400 mg/kg and 13 mg/kg, respectively, are based on Section 35 Illinois Administrative Code (IAC), Part 742 - Tiered Approach to Corrective Action Objectives (TACO), Appendix B, Table B-Tier 1 Soil Remediation Objectives for Industrial/Commercial Properties, and were being used by the PRP for previous cleanup activities at the Site.

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has begun planning for provisions of post-removal site control, consistent with the provisions of Section 300.415 of the NCP. Elimination of all surface and subsurface threats is, however, expected to minimize the need for post-removal Site control.

Applicable or relevant and appropriate requirements (ARARs)

On August 3, 2004, a letter was sent to Bruce Everetts with the Illinois EPA, requesting State applicable or relevant and appropriate requirements (ARARs). Any state ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed, or no action, will increase the potential of the exposure to lead and threaten the adjacent population and the environment. No action will also allow for the potential off-site migration of lead during rain events, and for continued direct contact potential for the surrounding community.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this Site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Tower Hill Road Site-OU-1, Gilberts, Kane County, Illinois, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based upon the administrative record for the Site (See Attachment 2). Conditions at the Site and this OU continue to meet the NCP Section 300.415 (b)(2) criteria for a removal and I recommend your approval of the proposed removal action. It is hoped that the potentially responsible parties will perform all removal actions under the oversight of the OSC. You may indicate your decision by signing below.

APPROVE: _____

[Signature]
Acting Director, Superfund Division

DATE: _____

8/26/04

DISAPPROVE: _____

Acting Director, Superfund Division

DATE: _____

Enforcement Addendum

Attachments

1. Region 5 EJ Analysis
2. Administrative Record Index

cc: D. Stalcup, U.S. EPA, 5203-G
M. Chezik, U.S. DOI, w/o Enf. Addendum
B. Everetts, Illinois EPA, w/o Enf. Addendum
A. Connolly, Weil, Gotshal & Manges LLP, w/o Enf. Addendum

ATTACHMENT 1

REGION 5 EJ ANALYSIS

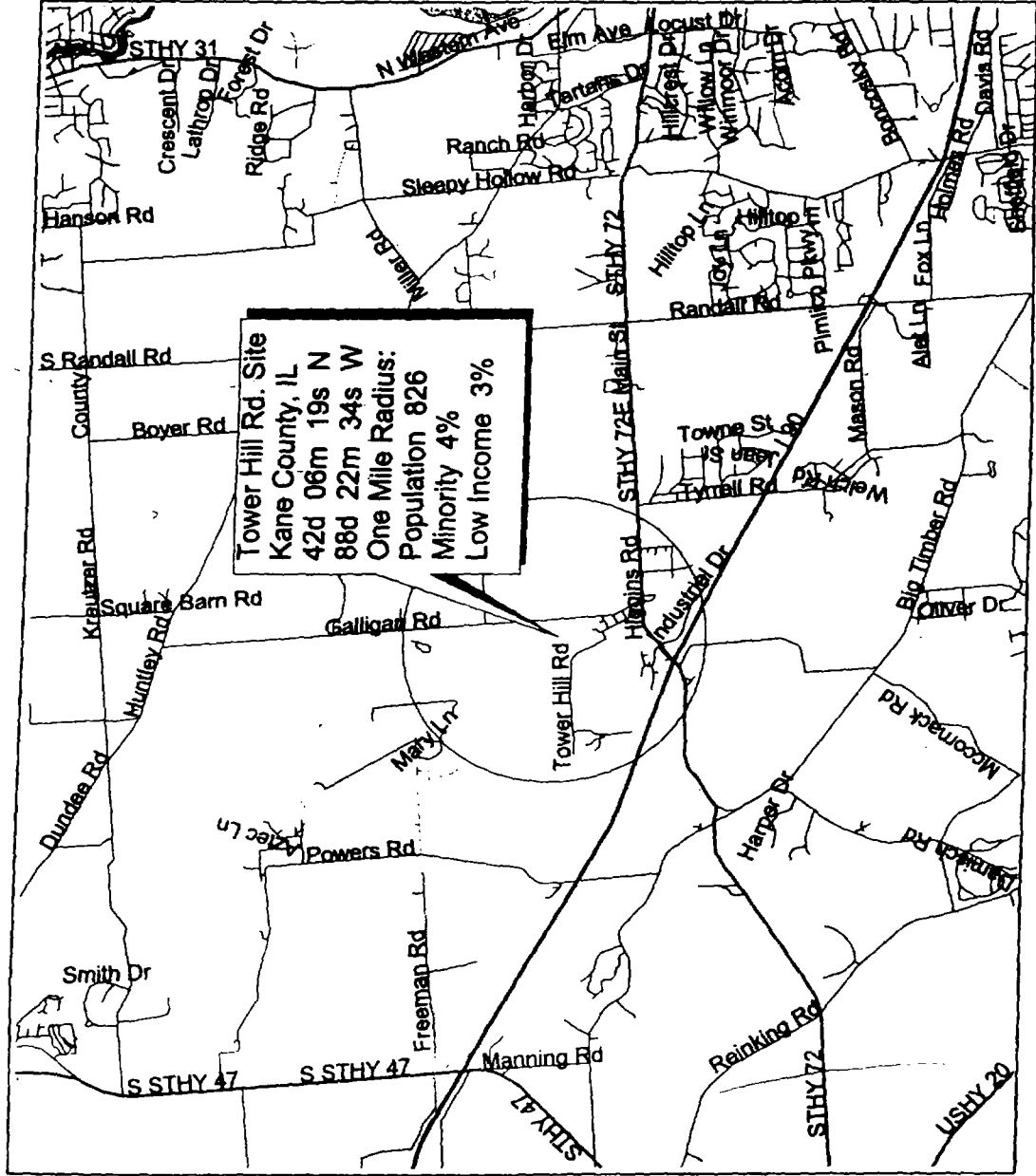
Region 5 Superfund EJ Analysis

Tower Hill Road Site Gilberts, IL

State of Illinois averages:
 Minority: 32%
 Low Income: 27%

U.S. EPA Region 5
 Environmental Justice Case Criteria
 for State of Illinois

Minority: 64% or greater
 Low Income: 58% or greater





ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD FOR TOWER HILL ROAD SITE - OPERABLE UNIT 1 GILBERTS, KANE COUNTY, ILLINOIS

ORIGINAL
AUGUST 11, 2004

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	03/15/04	Everetts, B., Illinois EPA	Bolen, W., U.S. EPA	Letter re: Illinois EPA's Request for a Time-Critical Removal Assessment at the Gilberts/Kedzie Property w/Attachments	49
2	03/31/04	Cook, T., U.S. EPA	Range, L., Illinois EPA	Memorandum re: Deter- mination of an Emergency Threat and Need to Perform an Emergency Removal Action at the Gilberts/Kedzie Site	1
3	04/30/04	Ribordy, M., U.S. EPA	Bolen, W., U.S. EPA	Action Memorandum: Request for an Emergency Removal Action at the Gilberts/Kedzie Site (PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED)	15
4	07/27/04	Mattox, M., U.S. EPA ESAT/ALION	U.S. EPA	Review of Region 5 Data for the Gilberts Landfill	6
5	08/06/04	Weston Solutions, Inc.	Ribordy, M., U.S. EPA	Letter Report re: Pre- liminary Results from the Gilberts Kedzie and Tower Hill Road Site Assessments	136
6	00/00/00	Ribordy, M., U.S. EPA	Karl, R., U.S. EPA	Enforcement Action Memo- randum: Determination of Need to Conduct a Time- Critical Removal Action at the Tower Hill Road Site - Operable Unit 1 (PENDING)	

